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APPL NO	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/731,875	12/09/2003	2121	0.00	9692-000029	33	30	3

CONFIRMATION NO. 9480

27572

HARNESS, DICKEY & PIERCE, P.L.C.  
 P.O. BOX 828  
 BLOOMFIELD HILLS, MI 48303

## FILING RECEIPT



\*OC000000012143267\*

Date Mailed: 03/19/2004

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).**

## Applicant(s)

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 Anish Kejariwal, San Francisco, CA;  
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 Huaiyu Mi, Palo Alto, CA;  
 Karen Diemer, Albany, CA;  
 Nan Guo, San Lorenzo, CA;  
 Istvan Ladunga, Foster City, CA;  
 Betty Lazareva, Sunnyvale, CA;  
 Anushya Muruganujan, Campbell, CA;  
 Steven Rabkin, San Francisco, CA;  
 Jody Vandergriff, San Francisco, CA;  
 Olivier Doremieux, San Francisco, CA;

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APR 26 2004

Technology Center 2100

## Domestic Priority data as claimed by applicant

This appln claims benefit of 60/431,879 12/09/2002

## Foreign Applications

If Required, Foreign Filing License Granted: 03/18/2004

Projected Publication Date: To Be Determined - pending completion of Missing Parts

Non-Publication Request: No

**Early Publication Request:** No

**Title**

Browsable database for biological use

**Preliminary Class**

700

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Title 35, United States Code, Section 184  
Title 37, Code of Federal Regulations, 5.11 & 5.15**

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APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/731,875	12/09/2003	Paul D. Thomas	9692-000029

27572

HARNESS, DICKEY & PIERCE, P.L.C.  
 P.O. BOX 828  
 BLOOMFIELD HILLS, MI 48303

CONFIRMATION NO. 9480

## FORMALITIES LETTER



\*OC000000012143268\*

Date Mailed: 03/19/2004

## NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

## Items Required To Avoid Abandonment:

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The statutory basic filing fee is missing.  
*Applicant must submit \$ 770 to complete the basic filing fee for a non-small entity. If appropriate, applicant may make a written assertion of entitlement to small entity status and pay the small entity filing fee (37 CFR 1.27).*
- The oath or declaration is missing.  
*A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.*
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.
- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 CFR 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (703) 308-4216
- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or [patin3help@uspto.gov](mailto:patin3help@uspto.gov)

The applicant needs to satisfy supplemental fees problems indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Additional claim fees of **\$180** as a non-small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due.

**SUMMARY OF FEES DUE:**


Total additional fee(s) required for this application is **\$1080** for a Large Entity

- **\$770** Statutory basic filing fee.
- **\$130** Late oath or declaration Surcharge.
- Total additional claim fee(s) for this application is **\$180**
  - **\$180** for 10 total claims over 20.

Replies should be mailed to: Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

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*A copy of this notice **MUST** be returned with the reply.*

  
Customer Service Center  
Initial Patent Examination Division (703) 308-1202  
PART I - ATTORNEY/APPLICANT COPY



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CONFIRMATION NO. 9480

## FORMALITIES LETTER



\*OC000000012143268\*

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  - **\$180** for **10** total claims over 20.

Replies should be mailed to: Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

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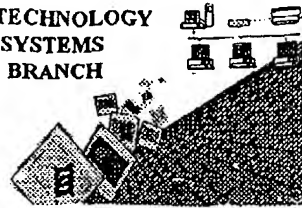
*A copy of this notice **MUST** be returned with the reply.*

*N. Mohammed*

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Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/731,875  
Source: OIPC  
Date Processed by STIC: 12-30-03

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221

*Effective 12/13/03:* TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efb/efs/downloads/documents.htm>> , EFS Submission User Manual - cPAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to (EFFECTIVE 12/01/03):  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03



# Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 10/731,875
ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE		
1 ___ Wrapped Nucleics ___ Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."	
2 ___ Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.	
3 ___ Misaligned Amino ___ Numbering	The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.	
4 ___ Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	
5 ___ Variable Length	Sequence(s) ___ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
6 ___ PatentIn 2.0 ___ "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.	
7 ___ Skipped Sequences ___ (OLD RULES)	Sequence(s) ___ missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped  Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.	
8 ___ Skipped Sequences ___ (NEW RULES)	Sequence(s) ___ missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000	
9 ___ Use of n's or Xaa's ___ (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
10 <input checked="" type="checkbox"/> Invalid <213> ___ Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence	
11 ___ Use of <220>	Sequence(s) ___ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 09/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)	
12 ___ PatentIn 2.0 ___ "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
13 ___ Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid	



IFWO

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/731,875

DATE: 12/30/2003

TIME: 15:35:37

Input Set : A:\Thomas, et al. (9692-000029) Seq. Listing.ST25.txt

Output Set: N:\CRF4\12302003\J731875.raw

3 <110> APPLICANT: Applera Corporation  
 4 Thomas, Paul  
 5 Kejariwal, Anish  
 6 Campbell, Michael  
 7 Mi, Huaiyu  
 8 Diemer, Karen  
 9 Guo, Nan  
 10 Ladunga, Istvan  
 11 Lazareva, Betty  
 12 Muruganujan, Anushya  
 13 Rabkin, Steven  
 14 Vandergriff, Jody  
 15 Doremieux, Olivier  
 17 <120> TITLE OF INVENTION: Browsable Database For Biological Use  
 19 <130> FILE REFERENCE: 9692-000029  
 C--> 21 <140> CURRENT APPLICATION NUMBER: US/10/731,875  
 C--> 21 <141> CURRENT FILING DATE: 2003-12-09  
 21 <160> NUMBER OF SEQ ID NOS: 63  
 23 <170> SOFTWARE: PatentIn version 3.2  
 25 <210> SEQ ID NO: 1  
 26 <211> LENGTH: 62  
 27 <212> TYPE: PRT  
 28 <213> ORGANISM: Exemplary Protein Sequence  
 30 <400> SEQUENCE: 1  
 32 Leu Ala Val Glu Val Leu Phe Ile Leu Asp Ile Val Leu Asn Phe Arg  
 33 1 5 10 15  
 36 Thr Thr Phe Val Ser Lys Gly Gln Val Val Phe Ala Pro Lys Ile Cys  
 37 20 25 30  
 40 Leu His Tyr Val Thr Thr Trp Phe Leu Leu Asp Val Ile Ala Ala Leu  
 41 35 40 45  
 44 Pro Phe Asp Leu Leu His Ala Lys Val Asn Tyr Phe Gly Ala  
 45 50 55 60

Does Not Comply  
 Corrected Diskette Needed

P.6

See item 10 on error summary sheet.

48 <210> SEQ ID NO: 2  
 49 <211> LENGTH: 62  
 50 <212> TYPE: PRT  
 51 <213> ORGANISM: Exemplary Protein Sequence  
 53 <400> SEQUENCE: 2  
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 56 1 5 10 15  
 59 Thr Thr Phe Val Ser Lys Gly Gln Val Val Phe Ala Pro Lys Ile Cys  
 60 20 25 30  
 63 Leu His Tyr Val Thr Thr Trp Phe Leu Leu Asp Val Ile Ala Ala Leu  
 64 35 40 45

## RAW SEQUENCE LISTING

DATE: 12/30/2003

PATENT APPLICATION: US/10/731,875

TIME: 15:35:37

Input Set : A:\Thomas, et al. (9692-000029) Seq. Listing.ST25.txt  
 Output Set: N:\CRF4\12302003\J731875.raw

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67 Pro Phe Asp Leu Leu His Ala Lys Val Asn Tyr Val Gly Ala
68      50                      55                      60
71 <210> SEQ ID NO: 3
72 <211> LENGTH: 62
73 <212> TYPE: PRT
74 <213> ORGANISM: Exemplary Protein Sequence
76 <400> SEQUENCE: 3
78 Leu Ala Val Glu Val Leu Phe Ile Leu Asp Ile Val Leu Asn Phe Arg
79 1      5                      10                      15
82 Thr Thr Phe Val Ser Lys Gly Gln Val Val Phe Ala Pro Lys Ile Cys
83      20                      25                      30
86 Leu His Tyr Val Thr Thr Trp Phe Leu Leu Asp Val Ile Ala Ala Leu
87      35                      40                      45
90 Pro Phe Asp Leu Leu His Ala Lys Val Asn Tyr Val Gly Ala
91      50                      55                      60
94 <210> SEQ ID NO: 4
95 <211> LENGTH: 62
96 <212> TYPE: PRT
97 <213> ORGANISM: Exemplary Protein Sequence
99 <400> SEQUENCE: 4
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102 1      5                      10                      15
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106      20                      25                      30
109 Ile His Tyr Val Thr Thr Trp Phe Ile Ile Asp Leu Ile Ala Ala Leu
110      35                      40                      45
113 Pro Phe Asp Leu Leu Tyr Ala Asn Val Thr Val Ser Leu Val
114      50                      55                      60
117 <210> SEQ ID NO: 5
118 <211> LENGTH: 62
119 <212> TYPE: PRT
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122 <400> SEQUENCE: 5
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125 1      5                      10                      15
128 Thr Thr Tyr Val Ser Lys Gly Gln Val Ile Phe Glu Ala Arg Ile Cys
129      20                      25                      30
132 Thr His Tyr Val Thr Thr Trp Phe Ile Ile Asp Leu Ile Ala Ala Leu
133      35                      40                      45
136 Pro Phe Asp Leu Leu Tyr Ala Asn Val Thr Val Ser Leu Val
137      50                      55                      60
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143 <213> ORGANISM: Exemplary Protein Sequence
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147 Ile Ala Val Glu Met Leu Phe Ile Leu Asp Ile Ile Leu Asn Phe Arg
148 1      5                      10                      15
151 Thr Thr Tyr Val Ser Gln Gly Gln Val Val Ser Ala Pro Arg Ile Gly

```

Same error

## RAW SEQUENCE LISTING

DATE: 12/30/2003

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TIME: 15:35:37

Input Set : A:\Thomas, et al. (9692-000029) Seq. Listing.ST25.txt  
 Output Set: N:\CRF4\12302003\J731875.raw

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152          20          25          30
155 Leu His Tyr Leu Ala Thr Trp Phe Phe Val Asp Leu Ile Ala Ala Leu
156          35          40          45
159 Pro Phe Asp Leu Leu Tyr Val Asn Ile Thr Thr Ser Leu Val
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166 <213> ORGANISM: Exemplary Protein Sequence
168 <400> SEQUENCE: 7
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171 1          5          10          15
174 Thr Thr Tyr Val Ser Gln Gly Gln Val Val Ser Ala Pro Arg Ile Gly
175          20          25          30
178 Leu His Tyr Leu Ala Thr Trp Phe Phe Val Asp Leu Ile Ala Ala Leu
179          35          40          45
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183          50          55          60
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187 <211> LENGTH: 62
188 <212> TYPE: PRT
189 <213> ORGANISM: Exemplary Protein Sequence
191 <400> SEQUENCE: 8
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194 1          5          10          15
197 Thr Thr Tyr Val Ser Gln Gly Gln Val Ile Ser Ala Pro Arg Ile Gly
198          20          25          30
201 Leu His Tyr Leu Ala Thr Trp Phe Ile Asp Leu Ile Ala Ala Leu
202          35          40          45
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206          50          55          60
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211 <212> TYPE: PRT
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214 <400> SEQUENCE: 9
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217 1          5          10          15
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221          20          25          30
224 Leu His Tyr Leu Ala Thr Trp Phe Phe Ile Asp Leu Ile Ala Ala Leu
225          35          40          45
228 Pro Phe Asp Leu Leu Tyr Ile Asn Ile Thr Thr Ser Leu Val
229          50          55          60
232 <210> SEQ ID NO: 10
233 <211> LENGTH: 67
234 <212> TYPE: PRT
235 <213> ORGANISM: Exemplary Protein Sequence
237 <400> SEQUENCE: 10

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same error,  
 see item 10 on error  
 summary report.

RAW SEQUENCE LISTING

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DATE: 12/30/2003

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Input Set : A:\Thomas, et al. (9692-000029) Seq. Listing.ST25.txt

Output Set: N:\CRF4\12302003\J731875.raw

239 Ser Ile Val Asp Val Ile Phe Phe Ile Asp Ile Val Leu Asn Phe His  
 240 1 5 10 15  
 243 Thr Thr Phe Val Gly Pro Gly Gly Glu Val Val Ser Asp Pro Lys Val  
 244 20 25 30  
 247 Ile Met Asn Tyr Leu Lys Ser Trp Phe Ile Ile Asp Leu Leu Ser Cys  
 248 35 40 45  
 251 Leu Pro Asp Val Phe Asn Ala Phe Asp Arg Asp Glu Asp Gly Ile Gly  
 252 50 55 60  
 255 Ser Leu Phe  
 256 65

259 <210> SEQ ID NO: 11

260 <211> LENGTH: 67

261 <212> TYPE: PRT

262 <213> ORGANISM: Exemplary Protein Sequence

264 <400> SEQUENCE: 11

266 Ser Ile Val Asp Val Ile Phe Phe Ile Asp Ile Val Leu Asn Phe His  
 267 1 5 10 15  
 270 Thr Thr Phe Val Gly Pro Gly Gly Glu Val Val Ser Asp Pro Lys Val  
 271 20 25 30  
 274 Ile Met Asn Tyr Leu Lys Ser Trp Phe Ile Ile Asp Leu Leu Ser Cys  
 275 35 40 45  
 278 Leu Pro Asp Val Phe Asn Ala Phe Asp Arg Asp Glu Asp Gly Ile Gly  
 279 50 55 60  
 282 Ser Leu Phe  
 283 65

286 <210> SEQ ID NO: 12

287 <211> LENGTH: 67

288 <212> TYPE: PRT

289 <213> ORGANISM: Exemplary Protein Sequence

Same error

291 <400> SEQUENCE: 12

293 Ser Ile Val Asp Val Ile Phe Phe Ala Asp Ile Leu Leu Asn Phe His  
 294 1 5 10 15  
 297 Thr Thr Phe Val Gly Pro Gly Gly Glu Val Val Ile Glu Pro Ser Val  
 298 20 25 30  
 301 Ile Gln Asn Tyr Phe Lys Ser Trp Phe Leu Ile Asp Leu Leu Ser Cys  
 302 35 40 45  
 305 Leu Pro Asp Ile Phe Tyr Met Phe Lys Arg Asp Asp Glu Arg Ile Gly  
 306 50 55 60  
 309 Ser Leu Phe  
 310 65

313 <210> SEQ ID NO: 13

314 <211> LENGTH: 67

315 <212> TYPE: PRT

316 <213> ORGANISM: Exemplary Protein Sequence

318 <400> SEQUENCE: 13

320 Ser Ile Val Asp Val Ile Phe Phe Ala Asp Ile Leu Leu Asn Phe His  
 321 1 5 10 15  
 324 Thr Thr Phe Val Gly Pro Gly Gly Glu Val Val Ile Glu Pro Ser Val  
 325 20 25 30

## RAW SEQUENCE LISTING

DATE: 12/30/2003

PATENT APPLICATION: US/10/731,875

TIME: 15:35:37

Input Set : A:\Thomas, et al. (9692-000029) Seq. Listing.ST25.txt

Output Set: N:\CRF4\12302003\J731875.raw

328 Ile Gln Asn Tyr Phe Lys Ser Trp Phe Leu Ile Asp Leu Leu Ser Cys  
 329           35                   40                   45  
 332 Leu Pro Asp Ile Phe Tyr Met Phe Lys Arg Asp Asp Glu Arg Ile Gly  
 333       50                   55                   60  
 336 Ser Leu Phe  
 337 65

340 &lt;210&gt; SEQ ID NO: 14

341 &lt;211&gt; LENGTH: 67

342 &lt;212&gt; TYPE: PRT

343 &lt;213&gt; ORGANISM: Exemplary Protein Sequence

345 &lt;400&gt; SEQUENCE: 14

347 Ser Val Val Asp Val Ile Phe Leu Val Asp Ile Val Leu Asn Phe His  
 348 1                   5                   10                   15  
 351 Thr Thr Phe Val Gly Pro Gly Gly Glu Val Ile Ser Asp Pro Lys Leu  
 352           20                   25                   30  
 355 Ile Met Asn Tyr Leu Lys Thr Trp Phe Val Ile Asp Leu Leu Ser Cys  
 356       35                   40                   45  
 359 Leu Pro Asp Ile Ile Asn Ala Phe Glu Asn Val Asp Glu Gly Ile Ser  
 360       50                   55                   60  
 363 Ser Leu Phe  
 364 65

367 &lt;210&gt; SEQ ID NO: 15

368 &lt;211&gt; LENGTH: 67

369 &lt;212&gt; TYPE: PRT

370 &lt;213&gt; ORGANISM: Exemplary Protein Sequence

372 &lt;400&gt; SEQUENCE: 15

374 Ser Val Val Asp Val Ile Phe Leu Val Asp Ile Val Leu Asn Phe His  
 375 1                   5                   10                   15  
 378 Thr Thr Phe Val Gly Pro Gly Gly Glu Val Ile Ser Asp Pro Lys Leu  
 379           20                   25                   30  
 382 Ile Met Asn Tyr Leu Lys Thr Trp Phe Val Ile Asp Leu Leu Ser Cys  
 383       35                   40                   45  
 386 Leu Pro Asp Ile Ile Asn Ala Phe Glu Asn Val Asp Glu Gly Ile Ser  
 387       50                   55                   60  
 390 Ser Leu Phe  
 391 65

394 &lt;210&gt; SEQ ID NO: 16

395 &lt;211&gt; LENGTH: 80

396 &lt;212&gt; TYPE: PRT

397 &lt;213&gt; ORGANISM: Exemplary Protein Sequence

399 &lt;400&gt; SEQUENCE: 16

401 Ser Ile Val Asp Val Ile Phe Leu Val Asp Ile Val Leu Asn Phe His  
 402 1                   5                   10                   15  
 405 Thr Thr Phe Val Gly Pro Ala Gly Glu Val Ile Ser Asp Pro Lys Leu  
 406           20                   25                   30  
 409 Ile Met Asn Tyr Leu Lys Thr Trp Phe Val Ile Asp Leu Leu Ser Cys  
 410       35                   40                   45  
 413 Leu Pro Asp Val Ile Asn Ala Phe Glu Asn Val Asp Glu Val Ser Ala  
 414       50                   55                   60

The type of errors shown exist throughout  
 the Sequence Listing. Please check subsequent  
 sequences for similar errors.

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/731,875

DATE: 12/30/2003  
TIME: 15:35:38

Input Set : A:\Thomas, et al. (9692-000029) Seq. Listing.ST25.txt  
Output Set: N:\CRF4\12302003\J731875.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:50; Xaa Pos. 8

Seq#:60; Xaa Pos. 5

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/731,875

DATE: 12/30/2003

TIME: 15:35:38

Input Set : A:\Thomas, et al. (9692-000029) Seq. Listing.ST25.txt

Output Set: N:\CRF4\12302003\J731875.raw

L:21 M:270 C: Current Application Number differs, Replaced Current Application No

L:21 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:1481 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0

L:1597 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:0